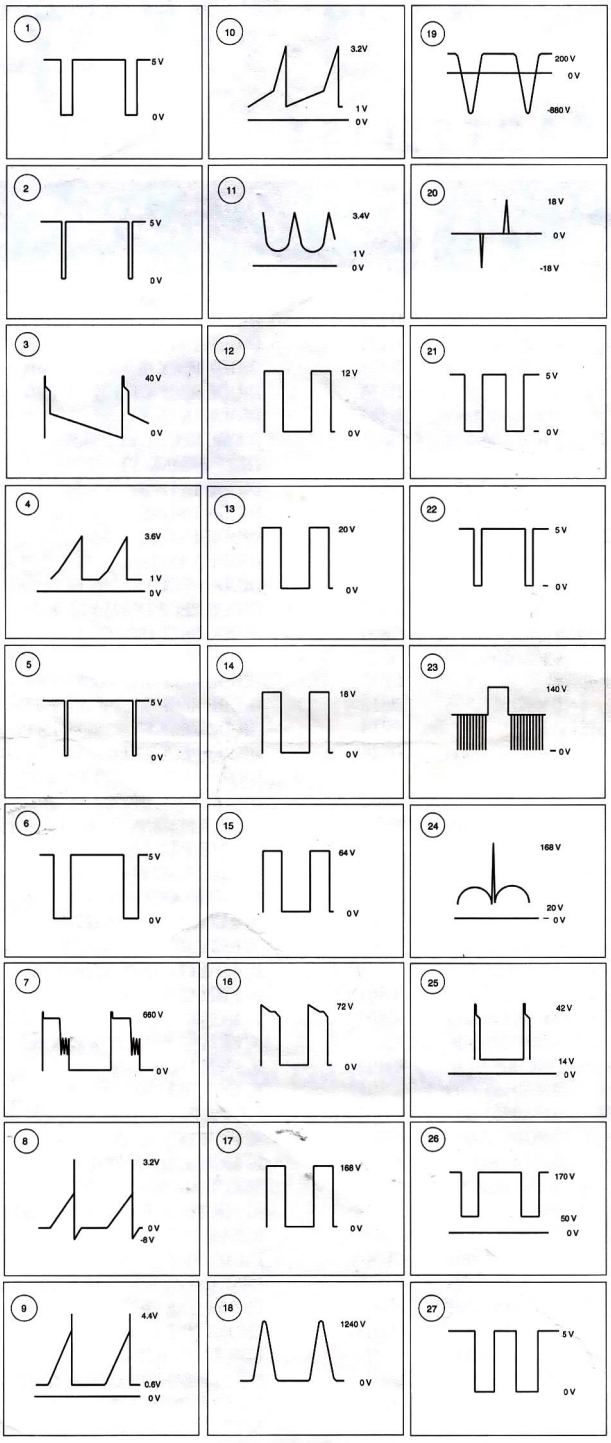
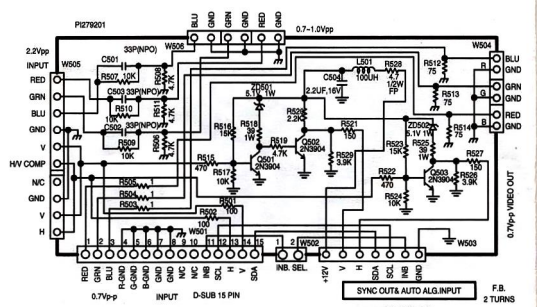
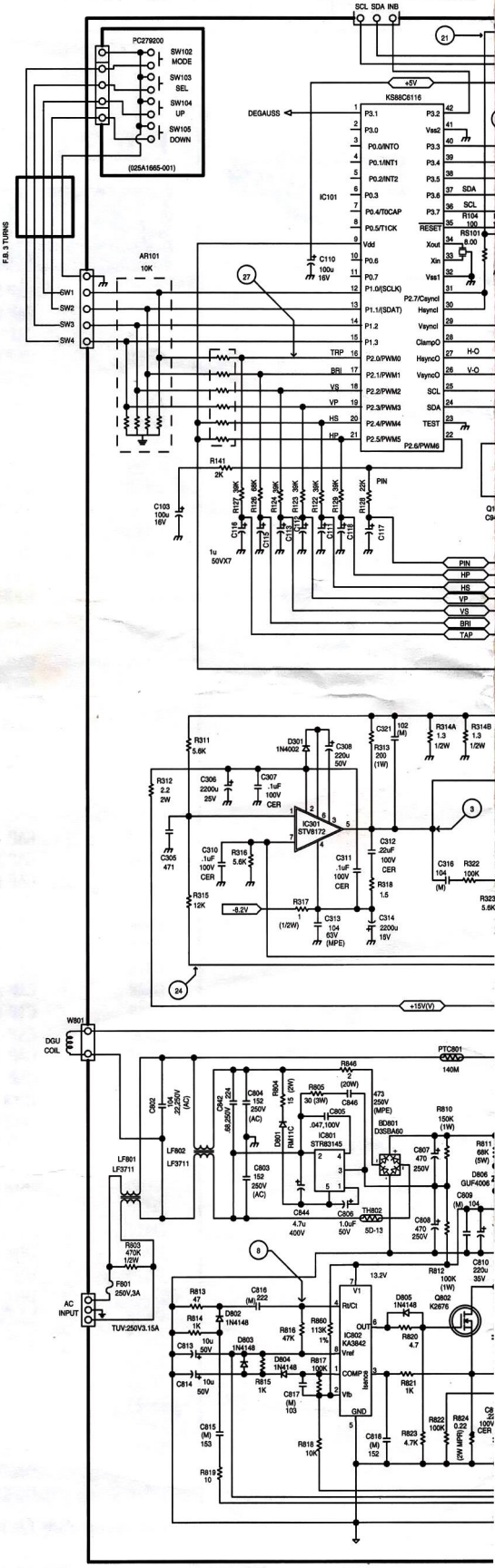
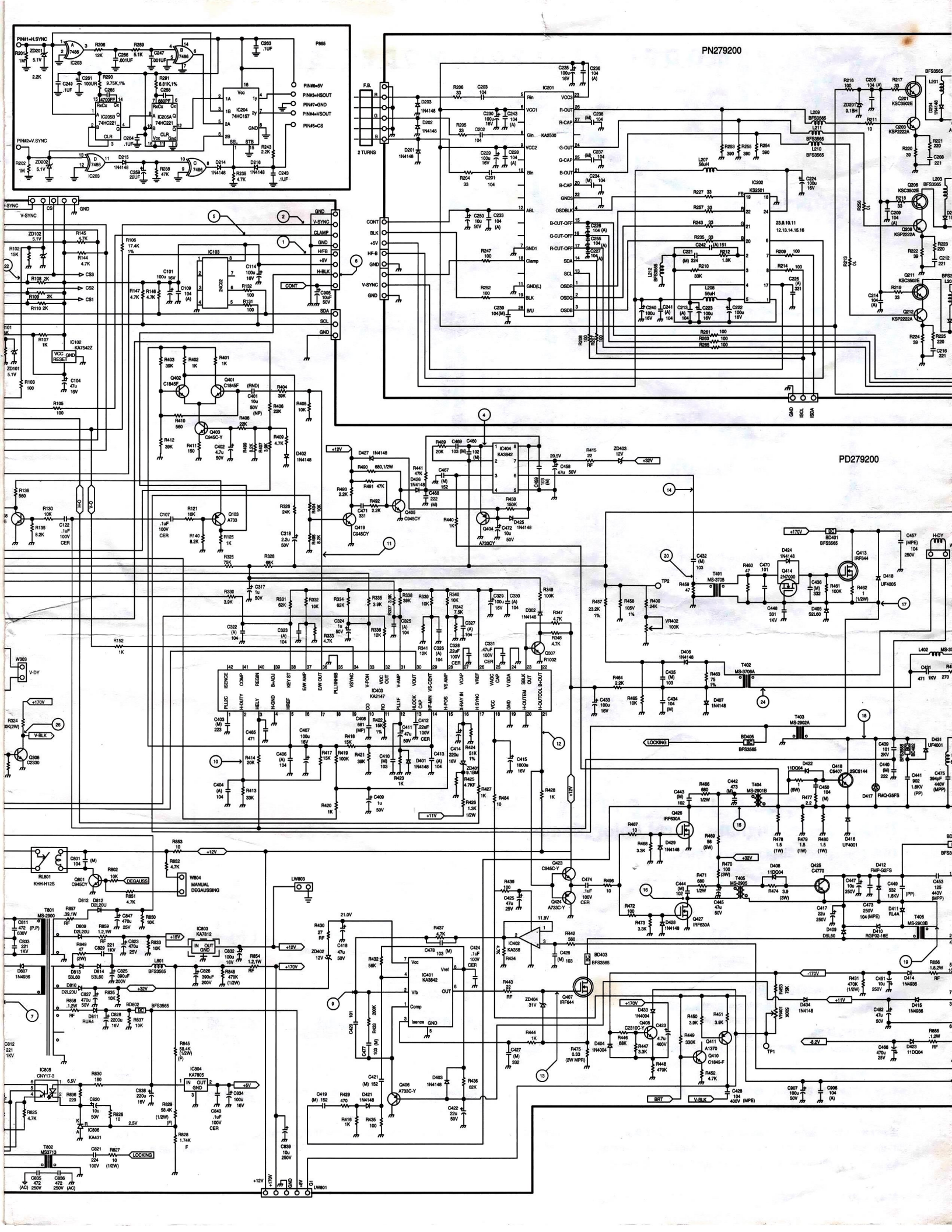
WELLS-GARDNER®

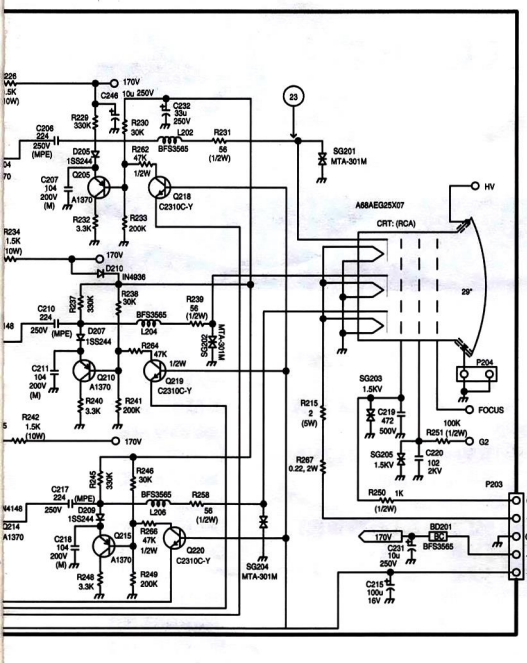
ELECTRONICS CORPORATION

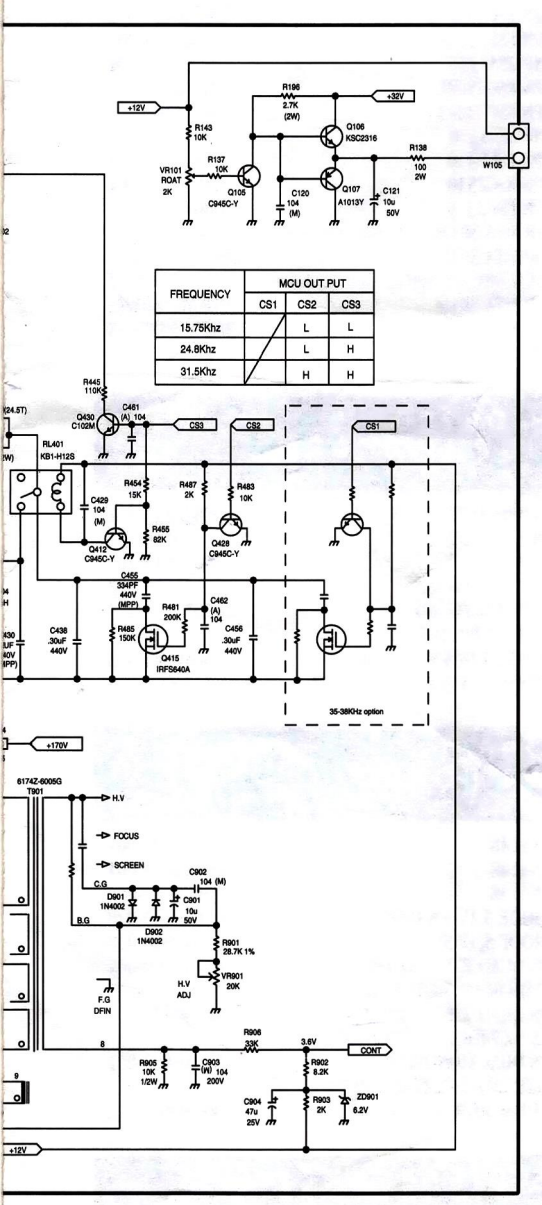







PN279200
PD279200
PIN#1=H.SYNC
PIN#2=V.SYNC
PIN#6=5V
PIN#3=HSOUT
PIN#7=GND
PIN#4=VSOUT
PIN#5=CS
P865
2 TURNS
F.B.
V-SYNC
CS
GND
CLAMP
H/FB
+5V
H-BLK
CONT
SDA
SCL
BLK
+5V
HF-B
V-BLK
BRT
LOCKING
DEGAUSS
MANUAL DEGAUSSING
23.9.10.11
12.13.14.15.16
IC201
IC202
IC103
IC102
IC403
IC404
IC401
IC402
IC803
IC804
IC805
IC806
T401
T402
T403
T404
T405
T406
T801
T802
RL801
LW803
LW801
W303
V-DY
H-DY
V-BLK
TP1
TP2





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CONFIDENTIAL DOCUMENT

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NOTE
1. RESISTANCE IS SHOWN IN OHM K = 1,000 M = 1,000,000
2. UNLESS OTHERWISE NOTED IN SCHEMATIC ALL CAPACITOR VALUES LESS THAN 1 ARE EXPRESSED IN uF AND THE VALUES MORE THAN 1 IN pF

MODEL 27D9200
MODEL 33D9200

REGISTERED ISO 9001 QUALITY

WELLS-GARDNER®
ELECTRONICS CORPORATION

REPLACEMENT PARTS LIST (cont.)

Main, Neck & Control PCB Assembly Parts List

ISO 9001 REGISTERED QUALITY

PD279200 PCB RSDD D9200 CGA/EGA/VGA DEFL BD (cont.)

DESIGNATION	DESCRIPTION	PART NO.
Q404	TRSTR PNP 2SA733Q	086X0379-001
Q405	TRSTR NPN 2SC945P	086X0380-001
Q406	TRSTR PNP 2SA733Q	086X0379-001
Q407	FET IRF644A	086X0386-001
Q408	TRSTR NPN KSC2310	086X0381-001
Q410	TRSTR NPN KSC1845-F	086X0385-001
Q411	TRSTR PNP 2SA1370	086X0387-001
Q412	TRSTR NPN 2SC945P	086X0380-001
Q413	FET IRF644A	086X0386-001
Q414	FET 2N7000	086X0390-001
Q415	FET IRFS640A	086X0388-001
Q418	TRSTR NPN 2SC5144 (TOSHIBA)	086X0413-001
Q419	TRSTR NPN 2SC945P	086X0380-001
Q423	TRSTR NPN 2SC945P	086X0380-001
Q424	TRSTR PNP 2SA733Q	086X0379-001
Q425	TRSTR NPN 2SC4770	086X0392-001
Q426	FET IRF630A	086X0389-001
Q427	FET IRF630A	086X0389-001
Q428	TRSTR NPN 2SC945P	086X0380-001
Q430	TRSTR NPN KSR1002	086X0384-001
Q801	TRSTR NPN 2SC945P	086X0380-001
Q802	FET 2SK2676	086X0393-001
PTC801	THERM PTC 14 OHM 220	043X0517-001
RL401	SWITCH POWER RELAY DPST TV-5 RATING	002A0744-001
RL801	SWITCH POWER RELAY SPST TV-5 RATING	002A0745-001
RS101	CAP RESONATOR CERA CERA CST 8.00 MGW	2D5CV1280003
R415	RES 22 OHM 5% 1/4W RF FUSING	044X0509-001
R430	RES 27 OHM 5% 1/4W FF FUSING	044X0509-006
R443	RES 22 OHM 5% 1/4W RF FUSING	044X0509-001
R804	RES 15 OHM 5% 2W MO/MF	340X5150-633
R854	RES 1.2 OHM 5% 1W RF FUSING	044X0509-003
R855	RES 0.1 OHM 5% 2W RF FUSING	044X0509-004
R856	RES 1.8 OHM 5% 2W RF FUSING	044X0509-005
R857	RES 0.39 OHM 5% 2W RF FUSING	044X0509-002
R858	RES 0.1 OHM 5% 2W RF FUSING	044X0509-004
R859	RES 0.1 OHM 5% 2W RF FUSING	044X0509-004
TH802	THERM NTC 5 OHM 3A (08SP005)	043X0518-001
T401	TFMR HORIZ SIZE REG(B+)	053X0666-001
T402	TFMR HORIZ LIN FEED BACK	053X0665-001
T403	TFMR HORIZ PULSE	053X0664-001
T404	TFMR HORIZ SCAN	053X0663-001
T405	TFMR HORIZ DRIVER	053X0662-001
T406	TFMR HV REG HORIZ DEFL	053X0661-001
T801	TFMR SMPS	053X0660-001
T802	TFMR SYNC	053X0659-001
T901	FLBK TFMR D9200 27"	053X0658-001
ZD101	ZENER DIODE 5.1V 5%	066X0040-028
ZD102	ZENER DIODE 5.1V 5%	066X0040-028
ZD401	ZENER DIODE 9.1V 5% 0.5W	066X0040-020
ZD402	ZENER DIODE 12V 5% 0.5W	066X0040-051
ZD403	ZENER DIODE 12V 5% 0.5W	066X0040-051
ZD404	ZENER DIODE 31V 5% 0.4W	066X0040-004
ZD901	ZENER DIODE 6.2V 5% 0.5W	066X0040-036

PN279200 PCB D9200 VIDEO NECK BOARD

DESIGNATION	DESCRIPTION	PART NO.
CS201	SOCKET CRT 29MM D9200	003A0717-001
C206	CAP .22UF 5% 250V METAL FILM	047X0789-014
C207	CAP .10UF 5% 250V METAL FILM	047X0789-012
C210	CAP .22UF 5% 250V METAL FILM	047X0789-014
C211	CAP .10UF 5% 250V METAL FILM	047X0789-012
C217	CAP .22UF 5% 250V METAL FILM	047X0789-014
C219	CAP 4700 pF 10% Z5F 500 CER	080X0099-056
C220	CAP 1000PF 10% Z5F 2KV CER	080X0099-095
D201	DIODE 1N4148	066X0099-001
D202	DIODE 1N4148	066X0099-001

PN279200 PCB D9200 VIDEO NECK BOARD (cont.)

DESIGNATION	DESCRIPTION	PART NO.
D203	DIODE 1N4148	066X0099-001
D204	DIODE 1N4148	066X0099-001
D205	DIODE HV SWITCHING 1SS244 .2A 250V	066X0174-001
D206	DIODE 1N4148	066X0099-001
D207	DIODE HV SWITCHING 1SS244 .2A 250V	066X0174-001
D208	DIODE 1N4148	066X0099-001
D209	DIODE HV SWITCHING 1SS244 .2A 250V	066X0174-001
D210	DIODE RECT 1N4936 1A 400V	066X0164-001
IC201	IC KA2500 (UKA2500–N)	086X0369-001
IC202	IC VIDEO OSD S5D2501E01 (KS2501B)	086X0370-002
L207	COIL PEAKING 56UH	009A2811-019
L208	COIL PEAKING 56UH	009A2811-019
Q201	TRSTR NPN KSC3502E	086X0402-001
Q203	TRSTR NPN KSP2222A	086X0403-001
Q205	TRSTR PNP 2SA1370	086X0387-001
Q206	TRSTR NPN KSC3502E	086X0402-001
Q208	TRSTR NPN KSP2222A	086X0403-001
Q210	TRSTR PNP 2SA1370	086X0387-001
Q211	TRSTR NPN KSC3502E	086X0402-001
Q212	TRSTR NPN KSP2222A	086X0403-001
Q215	TRSTR PNP 2SA1370	086X0387-001
Q218	TRSTR NPN KSC2310	086X0381-001
Q219	TRSTR NPN KSC2310	086X0381-001
Q220	TRSTR NPN KSC2310	086X0381-001
SG201	SPARK GAP MTA 301M	2DDXMTA301MT
SG202	SPARK GAP MTA 301M	2DDXMTA301MT
SG203	SPARK GAP 1.5KV +/- 500V	2DDX1500V—T
SG204	SPARK GAP MTA 301M	2DDXMTA301MT
SG205	SPARK GAP 1.5KV +/- 500V	2DDX1500V—T
ZD201	ZENER DIODE 9.1V 5%	066X0040-020

PI279201 PCB D9200 VIDEO/SYNC INPUT BOARD

DESIGNATION	DESCRIPTION	PART NO.
Q501	TRSTR 2N3904 MOT	086X0113-501
Q502	TRSTR 2N3904 MOT	086X0113-501
Q503	TRSTR 2N3904 MOT	086X0113-501
R518	RES 39 OHM 5% 1W MO	420X4390-323
R525	RES 39 OHM 5% 1W MO	420X4390-323
W501	CONNECTOR 15 PIN D-S	2D5CJ71DSUB1
ZD501	ZENER DIODE 5.1V 5%	066X0040-033
ZD502	ZENER DIODE 5.1V 5%	066X0040-033

P865 PCB D9200 27" SYNC DECODER BOARD

DESIGNATION	DESCRIPTION	PART NO.
D214	DIODE 1N4148	066X0099-001
D215	DIODE 1N4148	066X0099-001
D216	DIODE 1N4148	066X0099-001
ZD201	ZENER DIODE 5.1V 5% 0.5W	066X0040-028
ZD202	ZENER DIODE 5.1V 5% 0.5W	066X0040-028
IC203	IC HCMOS QUAD EXLUSIVE OR GATEMC74HC86AN(MOTOROLA)	086X0399-001
IC204	IC HCMOS QUAD 2 TO 1 LNE DTA SLCT/MUX MC74HC157N(FAIRCHILD)	086X0401-001
IC205	IC HCMOS DUAL MONOSTABLE MUTIVBRTR CD74HC221E(HARRIS)	086X0400-001
P209	HEADER DUAL ROW RA .100 14P	006A0484-014

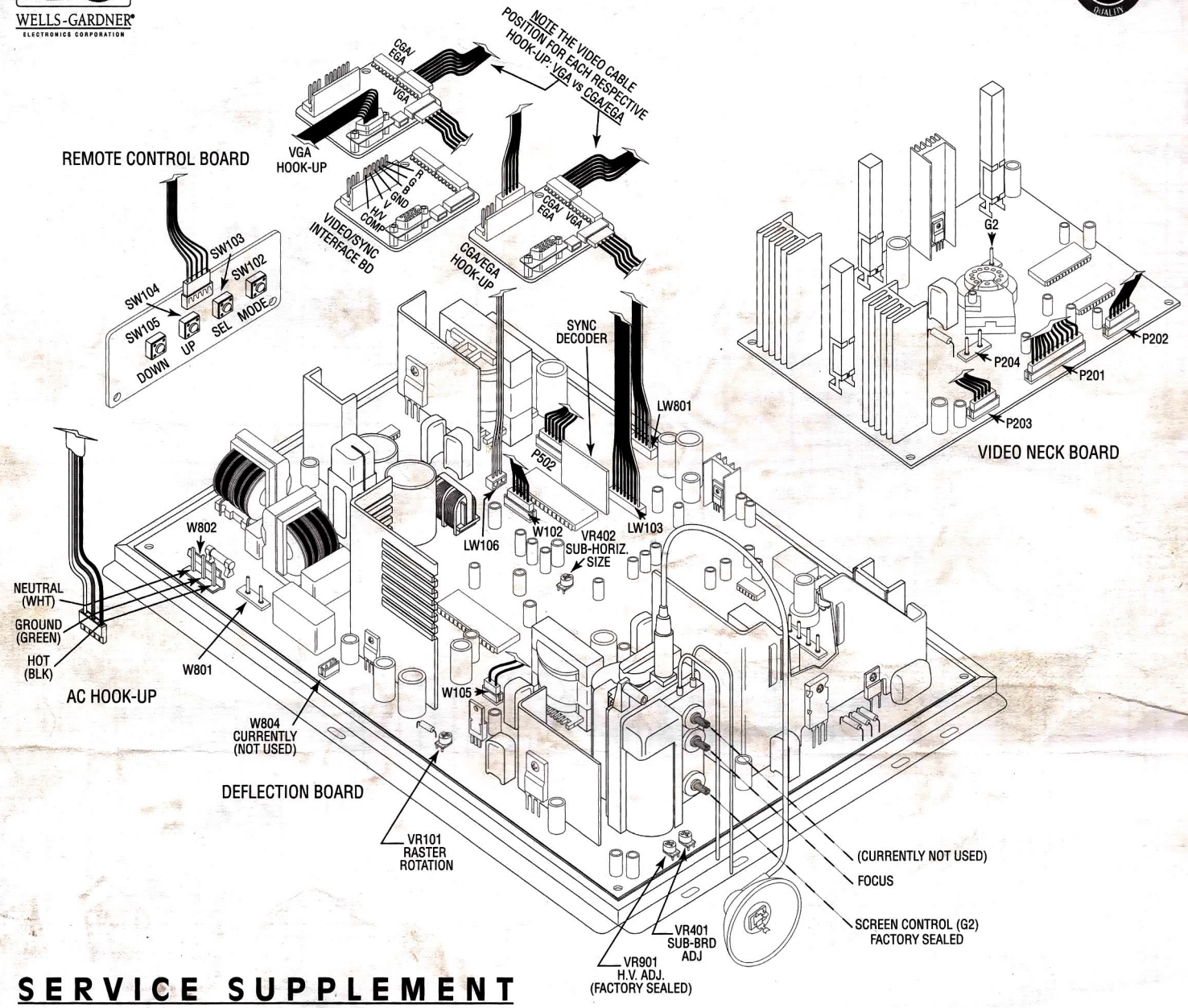
MODEL PARTS DIFFERENCE LIST

DESCRIPTION	PART NO.
CRT 27" RCA GRADE A A68AEG25X07	088X0370-001
CRT 33" HITACHI A80LJF30X(G)	088X0440-506

WELLS-GARDNER
ELECTRONICS CORPORATION

MODEL 27D9200/MODEL 33D9200

ISO 9001 REGISTERED QUALITY

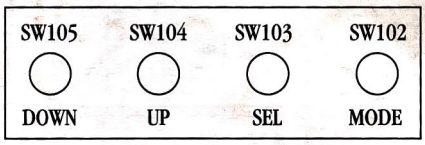


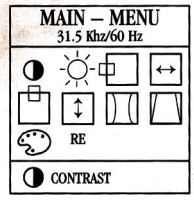
SERVICE SUPPLEMENT

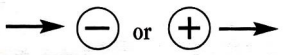
D9200 Series Digital-Control Color Monitor

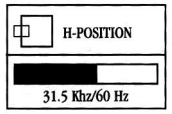
ODS (On screen display menu) CONTROLS & ADJUSTMENTS

There are four switches on the control panel with Key







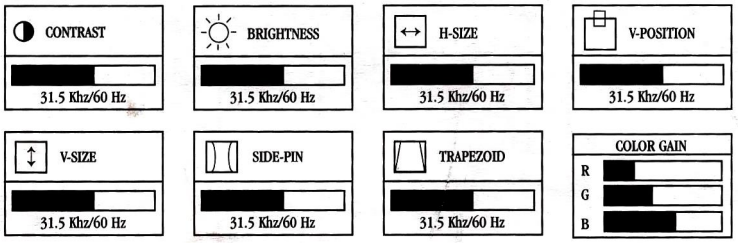


Key Descriptions:

1. MODE
Calls or removes MAIN MENU
Saves adjusted value and returns to MAIN MENU

2. SEL/DEGAUSS
When Main Menu is not displayed by pressing Select, the monitor will degauss

3. DOWN/UP
Searches Icon on Main Menu
Adjusts the value of each icon



If you require different display characteristics, other than the factory mode presets of size, position, color settings, use the control panel to program it to your requirements in each resolution mode. This monitor is capable of operating in (3) different scan frequencies CGA(15.75kHz), EGA(24.8kHz) and VGA(31.5kHz) with a +/- 1.8 Khz tolerance, by simply selecting a video input and changing the cable position.

WELLS-GARDNER®
ELECTRONICS CORPORATION

MODEL 27D9200
MODEL 33D9200

ISO 9001 REGISTERED QUALITY

REPLACEMENT PARTS LIST

PD279200 PCB RSDD D9200 CGA/EGA/VGA DEFL BD		
DESIGNATION	DESCRIPTION	PART NO.
C314	CAP LYT 2200UF 20% 16V 85 DEG	045X0560-067
C417	CAP LYT 22UF 20% 250V 85 DEG	045X0560-066
C428	CAP .1UF 10% 400V MET P-ESTER	046X0540-010
C430	CAP 1.2UF 5% 440V HIGH CURRENT/HIGH VOLT MET P-PROP	046X0564-007
C431	CAP 470PF 5% N750 1K CER	080X0099-244
C438	CAP .3UF 5% 440V HIGH CURRENT/ HIGH VOLT MET P-PROP	046X0564-004
C439	CAP 100PF 10% X5F 2KV CER	080X0099-251
C441	CAP .009UF 5% 1600V HIGH CURRENT/HIGH VOLT MET P-PROP	046X0564-002
C442	CAP .047UF 5% 250V METAL FILM	047X0789-011
C448	CAP 330PF 10% Y5F 1KV CER	080X0099-237
C449	CAP .0053UF 5% 1600V HIGH CURRENT/HIGH VOLT MET P-PROP	046X0564-001
C453	CAP 1.2UF 5% 440V HIGH CURRENT/HIGH VOLT MET P-PROP	046X0564-007
C455	CAP .33UF 5% 440V HIGH CURRENT/HIGH VOLT VOLT MET P-PROP	046X0564-005
C456	CAP .3UF 5% 440V HIGH CURRENT/HIGH VOLT MET P-PROP	046X0564-004
C457	CAP .1UF 5% 250V MET P-ESTER	046X0540-014
C473	CAP .1UF 5% 250V MET P-ESTER	046X0540-014
C475	CAP .39UF 5% 440V HIGH CURRENT/HIGH VOLT MET P-PROP	046X0564-006
C802	CAP .22UF 20% 250V UL/CSA/VDE	046X0547-001
C803	CAP 1500PF 20% 400V UL/CSA/VDE	046X0547-004
C804	CAP 1500PF 20% 400V UL/CSA/VDE	046X0547-004
C807	CAP LYT 470UF 20% 250V 85 DEG C	045X0600-005
C808	CAP LYT 470UF 20% 250V 85 DEG C	045X0600-005
C811	CAP .0047UF 5% 630V MET P-ESTER	046X0540-015
C812	CAP 220PF 5% N1500 1KV CER	080X0099-116
C829	CAP 220PF 5% N1500 1KV CER	080X0099-116
C835	CAP 4700PF 20% 250V CER UL/CSA	046X0561-003
C836	CAP 4700PF 20% 250V CER UL/CSA	046X0561-003
C842	CAP .68UF 20% 250V UL/CSA/VDE	046X0552-005
C903	CAP .1UF 5% 250V MET P-ESTER	046X0540-014
D301	DIODE RECT 1N4002 1A 200V	066X0159-001
D404	DIODE RECT 1N4004 1A 400V	066X0160-001
D405	DIODE RECT S2L60 1.5A 600V	066X0172-001
D408	DIODE RECT-FAST 11DQ04 1A 45V	066X0171-001
D409	DIODE RECT D5L60 5A 600V	066X0173-001
D410	DIODE RECT RGP02-16E .5A 1600V	066X0161-001
D411	DIODE RECT RL4A 3A 600V	066X0162-001
D412	DIODE RECT FMP-G2FS 5A 1500V	066X0163-001
D414	DIODE RECT 1N4936 1A 400V	066X0164-001
D415	DIODE RECT 1N4936 1A 400V	066X0164-001
D416	DIODE RECT GUF4001 1A 50V	066X0165-001
D417	DIODE RECT FMQ-G5FS 10A 1500V	066X0167-001
D418	DIODE RECT GUF4005 1A 600V	066X0166-001
D421	DIODE 1N4148	066X0099-001
D422	DIODE RECT-FAST 11DQ04 1A 45V	066X0171-001
D423	DIODE RECT-FAST 11DQ04 1A 45V	066X0171-001
D424	DIODE 1N4148	066X0099-001
D425	DIODE 1N4148	066X0099-001
D426	DIODE 1N4148	066X0099-001

PD279200 PCB RSDD D9200 CGA/EGA/VGA DEFL BD (cont.)		
DESIGNATION	DESCRIPTION	PART NO.
D427	DIODE 1N4148	066X0099-001
D428	DIODE 1N4148	066X0099-001
D429	DIODE 1N4148	066X0099-001
D431	DIODE RECT GUF4001 1A 50V	066X0165-001
D433	DIODE RECT 1N4004 1A 400V	066X0160-001
D434	DIODE 1N4148	066X0099-001
D801	DIODE RECT 1.2A 1000V (RM11C SANKEN)	066X0179-001
D802	DIODE 1N4148	066X0099-001
D803	DIODE 1N4148	066X0099-001
D804	DIODE 1N4148	066X0099-001
D805	DIODE 1N4148	066X0099-001
D806	DIODE RECT 1A 800V GUF4006	066X0180-001
D807	DIODE RECT 1N4936 1A 400V	066X0164-001
D809	DIODE RECT D2L20U 1-3A 200V	066X0169-001
D810	DIODE RECT D2L20U 1-3A 200V	066X0169-001
D811	DIODE RECT 1.5A 600V RUA4	066X0177-001
D812	DIODE RECT D2L20U 1-3A 200V	066X0169-001
D813	DIODE RECT S3L604004 1.8A 600V	066X0170-001
D814	DIODE RECT S3L604004 1.8A 600V	066X0170-001
D901	DIODE RECT 1N4002 1A 200V	066X0159-001
D902	DIODE RECT 1N4002 1A 200V	066X0159-001
F801	FUSE BUSSMANN S506 250V 3.15A	016X0216-001
F801A	FUSE CLIP FC-21D	2D5NJ41FC21D
IC101	SOCKET IC 42 PIN (PC)	003A0716-001
IC101	IC U-COM #KS88C6116	086X0365-002
IC102	IC KA7542Z (UKA7542Z-N)	086X0372-001
IC103	IC KS24C02	086X0394-001
IC301	IC TDA8172 VERT IC DEFL SGS	086X0364-001
IC401	IC PWM UC3842AN	086X0257-001
IC402	IC KA358	086X0395-001
IC403	IC KB2147 DEFL PROCESSOR	086X0396-001
IC404	IC PWM UC3842AN	086X0257-001
IC801	IC LATCHED UNIV INOUT-VOLTAGE SW-(SANKEN STR83145)	086X0412-001
IC802	IC PWM UC3842AN	086X0257-001
IC803	IC MC7812ACT V REG MOT	086X0243-001
IC804	TRSTR MC7805CT V REG	086X0200-001
IC805	IC PHOTO-OPTOISOLATOR(CNY17-3)	086X0367-001
IC806	IC KA431AZ	086X0398-001
BD801	DIODE BRIDGE RECT D3SBA60 2A 800V (4A W/HEATSINKS)	066X0176-001
LF801	CHOKE LINE FILTER	052X0151-001
LF802	CHOKE LINE FILTER	052X0151-001
L402	COIL LINEARITY (24.5T)	009A3020-001
L404	COIL LINEARITY (CHOKE 60UH)	009A3021-001
Q103	TRSTR PNP 2SA733Q	086X0379-001
Q105	TRSTR NPN 2SC945P	086X0380-001
Q106	TRSTR NPN KSC2316(FAIRCHILD)	086X0429-001
Q107	TRSTR PNP KSA1013-Y	086X0382-001
Q108	TRSTR NPN 2SC945	086X0380-001
Q306	TRSTR NPN KSA2330Y	086X0383-001
Q307	TRSTR NPN KSR1002	086X0384-001
Q401	TRSTR NPN KSC1845-F	086X0385-001
Q402	TRSTR NPN KSC1845-F	086X0385-001
Q403	TRSTR NPN 2SC945P	086X0380-001

Replacement Parts List is continued inside.